Intel Vernier STEM

1. Site license for logger pro (Dave if need info for Dave Langan)
2. 15cm < motion detector< 6m
3. Use shortcut of CTL+N, then enter to quickly erase a “bad” line
4. Bulky sweaters can absorb the sound (50htz)
5. Using a poster board to bounce the signal works well
6. #1: Math/science: slope of line, rate, higher order thinking or synthesize for application question, line segment; includes using legend and being accurate about starting distance, endpoint and time
7. “A” means auto-scale (will show flat line is really bumpy)

Moving the sensor gives smoother lines

1. Use experiment🡪store latest run to have red and blue lines on one graph
2. Inscribe circle for constant distance or use motion detector at same distance from wall
3. Parallel to graph works well
4. Yo yo’s would be lots of fun or squeeze and flip-its
5. File 🡪open will bring you to the movies in logger pro
6. P21.org
7. Do they have a meter to measure the stream flow?
8. Digital viewer🡪Show my notes will show all my additions

Homework for first night:

Which 21st skills do I want to target

Intel website for assessing project (self directed learners)

Brainstorming organizers

Clicker review

Lots of tools, did not sign on to see workspace

Curricular resource materials

Addressing standards select few, then select tomorrow

Learning objectives in student friendly language

i.e. students will create multi-media presentations on how the local fish habitats may be improved

tidal waves graphs when to go crabbing

make connection to global water scarcity

use thinking tool seeing reason to capture the brainstorm activity

check out the Help Guide tab, then word processing to get the tips – can be loaded on student computers

live binders.com

learn to use the magnifier tool for URL or little font

ceed.pdx.edu/itf/essentials10

moourl works like tinyurl

cognitive coaching group

pirate pad, type with me

avoidance of purchase

google or bing are both search enginges bing for images, clustie? “tree frog.wma” “laptop maintenance.ppt”

quick.org

start narrow

teach good searching tools and, quotations, not

wordle (use as a daily review then make “multiples.”)

glickr.com little movie from pictures

linear regression site

Checklist – 21st century assessments

Rubrics

Daily objectives & goals

Reverse planning time – project management skills

Expert groups

Use timer on screen so students see how much time if it is due that day

Sandbox time; planning, reflecting (not once and done)

**Purpose** To teach students to investigate open-ended problems, to critique and evaluate ideas or phenomena, and to engage in creative thinking.

standards

K.1E.1 Gather evidence that the sun warms land, air, and water.

6.2E.1 Explain the water cycle and the relationship to landforms and weather.

5.2L.1 Explain the interdependence of plants, animals, and environment, and how adaptation influences survival.

7.2L.2 Explain the processes by which plants and animals obtain energy and materials for growth and metabolism.

8.4D.1 Define a problem that addresses a need, and using relevant science principles investigate possible solutions given specified criteria, constraints, priorities, and trade-offs.

H.2L.2 Explain how ecosystems change in response to disturbances and interactions. Analyze the relationships among biotic and abiotic factors in ecosystems.

H.2E.4 Evaluate the impact of human activities on environmental quality and the sustainability of Earth systems. Describe how environmental factors influence resource management.

H.3S.1 Based on observations and science principles, formulate a question or hypothesis that can be investigated through the collection and analysis of relevant information.

H.3S.2 Design and conduct a controlled experiment, field study, or other investigation to make systematic observations about the natural world, including the collection of sufficient and appropriate data.

H.1E.2 Describe the structure, function, and composition of Earth’s atmosphere, geosphere, and hydrosphere.

H.3S.3 Analyze data and identify uncertainties. Draw a valid conclusion, explain how it is supported by the evidence, and communicate the findings of a scientific investigation.